Planning & Community Development

Record Drawing/As-Builts Requirements

Record Drawing Requirements:
Record drawings are required for all construction projects conducted in the City of Shoreline that involve frontage improvement to the City right-of-way or for surface water drainage systems that connect to City infrastructure. All record drawings must be stamped and dated by a State of Washington Registered Engineer and if necessary a Surveyor.

Record drawing drawings are required prior to request for final inspection and issuance of Certificate of Occupancy.

The following requirements are intended to provide a minimum guide to the engineer of record and should be used along with good engineering practices.

Each sheet of the Record drawing plans shall include the following statement along with the engineer's professional stamp, signed and dated, located at the bottom right-hand corner of the sheet when possible:

> "These plans are record drawings and the information shown accurately reflects existing field conditions as of this date:_____"

General:
The Record Drawing Plans should consist of the design plans submitted, approved, and permitted for the construction project. The information shown shall reflect the actual construction completed under the permit with any and all deviations from the design plans. The modified design plans shall not have cross outs. Horizontal and vertical datum to be used are NAD 83(1991) and NAVD 88. Tie monumentation to at least two recognized and approved City monuments on or off site, with x, y, z coordinates for each. AutoCad drawings are to be drafted utilizing this datum for insertion into the City base maps.

If appropriate each utility shall be shown with detailed information. In addition, a composite with all utilities shown together, without detailed information, and focusing on utility crossings, is required. If the project has very limited utility information, request for approval for a composite only with all detailed information may be submitted to the City's Project Manager.

The layering convention and plans symbols shall follow established standards as indicated by the American Public Works Association, Washington State Chapter.

Record drawings are to be drawn on clean sheets and submitted to the requesting agency with one mylar copy and **two (2) sets** of blue line copies. AutoCad drawings are to be submitted on CD disk properly labeled with project and drawing names.

Sanitary Sewer:
Record drawing information for sanitary sewer, at minimum, should include, but not be limited to plan and profiles, including line size, slope, and length, location. All sanitary structures are to be labeled regarding type, size, function and inverts of all pipes connected to the structure.

- **Manholes** – Locations, types, rim/invert elevations inside/outside drops and valving.
- **Sewer Line** – Materials, locations, lengths, slopes, inverts, and sizes.
- **Side Sewers** – Materials, locations, lengths, sizes, and inverts at stub.
- **Public Utility Easements** – Locations and widths tied to property lines.
- **Details** – Details of any unique structures or features.

Water:
Record drawing information for water should include, but not be limited to: Location of all valves, tee junctions, bends, blocking, size of meters, hydrants, pressure reducing stations, and blow-offs. Sizes, type and lengths should be shown.

- **Water Lines** – Material, lengths, sizes, and location.
- **Water Valves** – Location, type, size.
- **Water Bends** – Location, size, type, blocking.
- **Water Main Blocking** – Location.
- **All Fittings** – Reducers, xxpanders, sleeves, etc.
- **Fire Hydrants** – Locations with valves.
- **Blow-off** – Locations and sizes of blow offs and valves.
- **Air and Vacuum Relief Valve** – Locations, size, valves.
- **Pressure Reducing Valves** – Locations and valving, bends, all fittings outside vault.
- **Water Meters** – Type, size and locations (domestic, irrigation, fire).
- **Water Services** – Size, locations, material.
- **Public Utility Easements** – Locations and widths tied to property lines.
- **Details of Connections**
- **Fire Sprinkler Connections** – Locations of line, size of line, type, location of detector vault, location of service valve.

Any and all unusual fittings or installations deemed applicable by City Inspector/Reviewer.

Surface Water Drainage:
Record drawing survey and volume calculations for the retention/detention ponds or compensatory storage systems, if any, must also be prepared and stamped by the appropriate design professional.

All storm drainage retention/detention system record drawings shall include the following statement:

"The surface water drainage (retention/detention) system has been constructed in conformance with the approved plans and is functioning as designed."

Information for the system, at minimum, should include, but not be limited to plans and profiles, including line size, slope, lengths, and locations. All storm structures are to be labeled indicating function, material, and whether the structure is cast in place or precast including invert elevations.

- **Manholes/Catch Basins** – Locations, types, rim/inert elevations of all pipes.
- **Storm Lines** – Materials, locations, lengths, slopes, sizes and inverts.
- **Materials** – Lengths, slopes, and sizes
- **Roof Drains** – Size, type and slope.

- **Oil/Water Separators** – Location, size, type, all rim/invert elevations.
- **Flow Control Structures** – Location, type, size, rim and all invert elevations, discharge control orifice sizes and elevations, overflow elevations.
- **Swales** – Plan and profiles, locations, length, width, slope; check dams, trash racks, cleanouts, and valving.
- **Details** – All structures required to be shown in detail. Details - any unique structures or features may also be required.
- **Public Utility Easements** – Locations and widths tied to property lines.
- **Retention/Detention Systems** – Volume of storage provided, storage elevation, storage/ponding limits, pond bottoms elevations, overflow elevations and locations, spillway, emergency overflow, berm elevations, piping with inverts.

Streets:
Record drawing information for roads should include, at minimum, but not limited to: Monument locations, slopes, roadway limits, profiles, and typical and non-standard cross sections.

- Center line elevations every 50 feet.
- Center line slopes and vertical.
- Gutter line elevations every 50 feet if not standard crown.
- Gutter line slopes and curve data if not standard crown.
- Gutter line elevations at intersections and as applicable.
- **Driveways** – Locations, lengths, and type.
- **Channelization** – Locations and type.
- **Signage** – Locations and type.
- **Illumination** – Locations, type, height, and wattage.
- **Service Cabinets -** Location and type.
- **Junction boxes** – Locations and type.
- **Conduits/Wire** – Locations, type, size, and depth.
- **Controller Cabinet** – Location and type.
- **Signalization** – Locations, type, height, and foundation depths and sizes.
- **Right-of-Way** – Locations and widths.